

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Listing of Claims:

Claim 1 (Currently Amended): A packet transmission system comprising:

a plurality of wireless base stations; and

one or more terminal devices belonging to one of the wireless base stations;

wherein each of the wireless base stations has

a location table describing each of the terminal devices associated with a

corresponding wireless base station to which the terminal device currently belongs,

a route control table describing each of the other wireless base stations in the network

in association with the next hop to which the received packet is to be forwarded if a source

terminal device or a destination terminal device currently belongs to one of the wireless base

stations, and

each of the wireless base stations is configured to exchange the information in the

location table with the other wireless base stations to update the location table; ~~and to forward~~

~~a received packet to a next hop along a transmission route toward a destination terminal~~

~~device and~~

each of the wireless base stations is configured to, upon receiving a packet, identify a

wireless base station to which the source terminal device or the destination terminal device

currently belongs based on a source address of the source terminal device or a destination

address of the destination terminal device, respectively, included in the received packet and

transmit the packet to the next hop to which the received packet is to be forwarded with

reference to the route control table.

Claims 2-4 (Cancelled).

Claim 5 (Currently Amended): The packet transmission system of claim [[3]] 1, wherein the received packet ~~contains~~ includes an ID information representing a of the transmission ~~route~~ tree used to transmit said received packet or address information representing a wireless base station to which the source terminal device or the destination terminal device currently belongs; and

wherein each of the wireless base stations is configured to determine the next hop to which the received packet is to be forwarded from the route control table based on the ID ~~information~~ of the transmission ~~route~~ tree or the address information of the wireless base station ~~contained~~ included in the packet.

Claim 6 (Previously Presented): A wireless base station constituting, together with other wireless base stations, a packet transmission system using a wireless packet network, comprising:

a location table describing each of terminal devices currently participating in the network associated with a corresponding one of the wireless base stations to which said terminal device currently belongs;

a route control table describing information items about transmission routes used in the packet transmission system, each information item being associated with one of the other wireless base stations assuming that said one of the other wireless base stations is related to a source or a destination;

a packet receiving unit configured to receive a packet;

a route determination unit configured to determine a route used to transmit the received packet based on information contained in the received packet; and

a packet transmission unit configured to transmit the packet to a next hop according to the route control table.

Claim 7 (Original): The wireless base station of claim 6, wherein the route determination unit identifies a terminal device indicated by a source address or a destination address contained in the received packet, determines a wireless base station to which the identified terminal device currently belongs with reference to the location table, and finds the next hop in the route control table.

Claim 8 (Original): The wireless base station of claim 6, wherein the packet transmission unit broadcasts a message packet reporting participation of a new terminal device when the new terminal device belongs to the wireless base station.

Claim 9 (Original): The wireless base station of claim 6, wherein when the receiving unit receives a message packet reporting a new terminal device having belonged to one of the other wireless base stations, the route determination unit updates the location table.

Claim 10 (Original): The wireless base station of claim 6, wherein when the receiving unit receives a packet from a source terminal device belonging to this wireless base station, the packet transmission unit writes an address of a destination side wireless base station to which a destination terminal device currently belongs in the packet, and then transmits the packet to the next hop according to the route control table.

Claims 11-28 (Cancelled).